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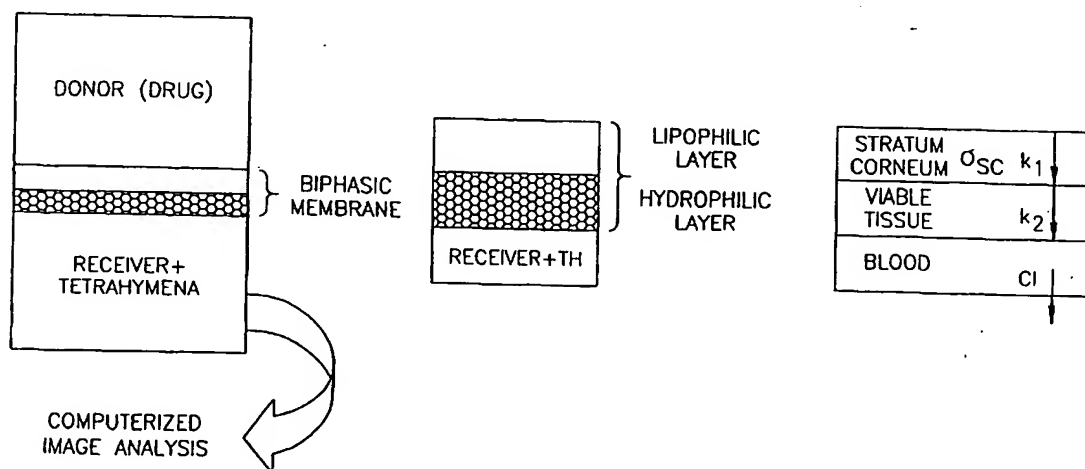
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(54) Title: IN VITRO TEST FOR STUDYING COMPOUND PREDICTING PHARMACOLOGIC AND/OR PHARMACOKINETIC AND/OR PHARMACODYNAMIC PARAMETERS OF A COMPOUND



(57) Abstract: The invention provides a method and an assay for predicting the pharmacologic and/or pharmacokinetic and/or pharmacodynamic activity and/or effective concentration of a test material using cell and/or protozoa and/or micro-organism by assessing the effect of the test material on the and/or protozoa and/or micro-organism. Further, the invention provides an apparatus or a system, which comprises a donor and a receiver compartments, separated by membrane, wherein cell and/or protozoa and/or micro-organism are present in the receiver compartments, for predicting the pharmacologic of pharmacokinetic effects such as effective concentration of a test material, by assessing the effect of the test material, on the cell and/or protozoa and/or micro-organism. In addition, the invention provides use of an artificial human skin for measuring the diffusion or the penetration of a test material through the skin.